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Before the  
**Federal Communications Commission**

Washington, D. C. 20554

In the Matter of )

Amendment of Parts 1, 2, and )  
21 of the Commission's Rules )  
Governing Use of the Frequencies )  
in the 2.1 and 2.5 GHz Bands )

PR Docket No. 92-80  
RM 7909

RECEIVED

JUN 29 1992

To: The Commission

ORIGINAL  
FILE

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

COMMENTS OF  
**SPECTRUM ANALYSIS & FREQUENCY ENGINEERING, INC.,**  
**IN RESPONSE TO NOTICE OF PROPOSED RULE MAKING**

SAFE

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Dated: June 29, 1992

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**IN RESPONSE TO NOTICE OF PROPOSED RULE MAKING**

**Spectrum Analysis & Frequency Engineering, Inc., (SAFE)** herewith submits its initial comments on the Commission's proposals designed to reduce the delays associated with the processing of applications for stations in the Multipoint Distribution Service (MDS) thereby allowing entities licensed in the MDS to realize their competitive potential.

**Introduction**

1. The Commission has instituted this proceeding in order to "...facilitate wireless cable as a competitive multichannel source of video programming."<sup>1</sup> We enthusiastically support the Commission in these efforts. There were over 20 specific requests for comment in the NPRM. We have responded to these requests and have also made a few suggestions of our own. We believe our proposals are technically more appropriate than the NPRM proposals, would allow flexibility in the placement of new stations, and would drastically

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<sup>1</sup> Notice of Proposed Rule Making (PR Docket No. 92-80, released May 8, 1992) at ¶ 4.

reduce the administrative burden on the commission. SAFE is an engineering consulting company with a unique perspective on the subject of this NPRM. Our clients are applicants, grantees, tentative selectees, operators, and investors. We must put into practice the "rules". It is our job to understand and follow every item and when unclear, to cover all bases by perhaps doing more than is actually required. All engineers and consultants who work in this service are faced with the problem of what to tell an applicant regarding the prospects for licensing their local community. As engineers required to prepare Engineering exhibits we feel the effect of these rulemakings directly. We know firsthand that the processing delay in this service causes the applicant and funding sources an uncertainty that is stifling to industry growth. We see directly the needs of these clients, their budgetary constraints, their sincerity or lack of sincerity. As consultants, we do not distinguish between single applicants and multiple applicants. We attempt to service the needs of all. The current rules are a maze of patchwork and we believe a total revamping is in order. An accurate database of applicants is of course vitally essential for any course of action. Because the current rules and more importantly, the enforcement of those rules are so nefarious and arbitrary, we always recommend legal counsel to our clients. An application for a license in this service is a very difficult, time consuming process that is ultimately a complete shot in the dark at best. There are 22 references to rulings and clarification listed as containing the details of regulations governing the service in the current FCC FACT SHEET dated 2/89. If it were to be brought up to date it would list nearly 30 references to rulings and rulemakings. Many of our clients have asked us questions as to the purpose of the FCC in this and previous rulemakings, as their applications are being returned often for reasons that we cannot adequately explain.<sup>2</sup>

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<sup>2</sup> One of more devastating arbitrary procedures of the FCC in the past 12 months has been

They have questioned the sincerity of the FCC when it appears that every effort is made to return applications rather than process them. Our engineers and associated legal team have been involved in various regulatory projects during the past 15 years in Common Carrier Microwave, Satellite Branch and the MDS service. Although the company SAFE is a recently incorporated entity, our engineers have been involved in the engineering for MMDS systems with great detail for the past three years. They have prepared both the engineering exhibits and the administrative portions of applications for MMDS service using FCC form 494 in some cases, FCC form 402 in others, FCC form 330 and 494 for certain situations, and FCC for 330 for still other situations. All this for a contiguous band of channels that at some point in time are usually going to be transmitted from one tower by a consortium of owner/applicants in any given market. I think you get the idea. It is generally agreed that in order to make the MMDS service competitive with cable at least 20 channels must be assembled. If the regulatory process facilitates that goal it would be helpful. Of course speed is important. We believe the current regulatory situation is totally unmanageable under current practices and within the current rules. We do not see the proposed rule changes as being helpful but see them as a further hindrance and simply more unmanageable obstacles to getting the job done. We will discuss each point requested by the FCC in this NPRM but will also suggest some totally new ideas which spring from our experience in processing paperwork, and developing accurate databases of applicant information.

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the return of hundreds of applications that do not meet the 50 mile rule. This 50 mile rule, is not a part of the formal FCC rules but is based on PN DA 88-562 released April 20, 1988. It has not been enforced at least until recently. In fact we were told explicitly by the FCC chief examiner in the MMDS section that it was unnecessary to request a waiver of that Public Notice. Without notice the FCC has made a major policy change affecting hundreds of applicants.

### **Summary**

1.) We believe that the 31 channels should be considered together, 2.) that there should be a prior coordination between service providers, 3.) that the FCC should require a quick build out, 4.) and the application process should be geared to making the entry of the data into the FCC database automatic. 5.) We believe that settlement groups may be applicable for situations where there is a new spectrum opened up and there is a lottery but for this service there should be no lottery or settlement groups.

### **Discussion**

#### **Suggestion 1.)Consider and process the entire 31 channels as one block.**

Whatever is done, the entire contiguous block of channels (2500, to 2686 mHz)<sup>2</sup> should be put together and considered together. A preference to bonafide Educational institutions should be given for a certain minimum number of channels a certain minimum time each week for their programming needs. (the current rules seem sufficient) But all 31 channels should be available for license by a single applicant. The already granted systems can be combined into 31 channel systems over the next 12 months. Instead of dealing with eight different entities in a market you are now dealing with one. A more than 1:8 reduction in time and effort on the part of the FCC accrues. And you have furthered the goal of making MMDS competitive with Cable. The practical implementation of this suggestion is difficult because of the way the rules have evolved over the past 10 years. However the FCC

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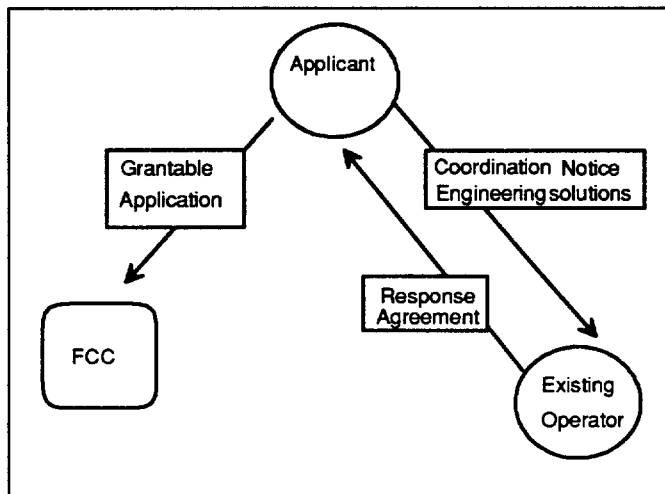
<sup>2</sup> MDS 1 and 2, 2A (2150 to 2162 mHz ) are technically difficult and/or expensive to integrate into a commercial MMDS system and are currently being ignored by most developers.

stipulates that the adjacent channel operator must collocate with the existing operators transmitter. So in a backhanded way they are required to become one system now since it is technically required. We simply think it should be recognized and formalized as a natural evolutionary step in the development of this service. To get all granted and selected licensees in each market to comply the FCC could simply give them 30 days to decide on the most appropriate transmit location for their system (highest building, mountain or best access etc.) and let them work it out. They would then resubmit their data on a new form which shows the owners of previously granted channels, channel by channel and the plan of technical and administrative operation of the system. Attached would be their agreements to lease channels, channel mapping, etc. There should be certain minimum information required but the resubmittal would not be subject to dismissal. Give them two or three times to get it right, then if there are problems they could get legal assistance from the FCC. If there are cooperation problems among members, then they would have to go to arbitration. There should be no need for "letter perfect" applications in this service at all especially if suggestion #2 and #3 are implemented. The FCC is here to assist investors and developers in getting the industry up and running not to hold it back.

#### **Suggestion 2.)MMDS Prior Coordination Process**

Before the FCC actually receives an application for service the MMDS applicant should first get concurrence from the previously granted/operating system owners (within 112 km) as to the compatibility of his/her system. This can be done through a "prior coordination" process similar to that used very successful in other services. It is well known that the

Domestic Satellite industry grew as a result of innovative regulatory control of the FCC's Common Carrier Bureau. The prior coordination process and minimal technical regulations are what led to the success story of the establishment and growth of Satellite Communications in a little more than 10 years.<sup>4</sup> The prior coordination process<sup>5</sup> would be successful in the MMDS service also. Sincere applicants would have a vehicle to use to get the job done. They would know if they are going to be successful as the coordination process is completed. The FCC would simply be a keeper of the records. This would eliminate the tedious technical



evaluation by the FCC staff of every MMDS application that is submitted. The FCC engineers could get involved only when there was a question or problem that could not be solved by the applicants or operators engineers during the coordination process. The prior

coordination would start the process of communication and cooperation among nearby service providers that is going to be essential for the success of this industry anyway.

<sup>4</sup> Datapro (McGraw-Hill, Inc.), Satellite Communications Legal and Regulatory Issues, April 1991, CA50-010-402,3

<sup>5</sup> Briefly, a prior coordination process is one where a notice of intent to file an application for a license is sent by the prospective applicant to all previously filed entities within a certain distance of the intended transmit location. Along with the notice there is usually an engineering resolution to potential interference conflicts. There is a fixed time period for replies, and responses during which each system engineer reviews the proposal and concurs with the evaluation. The proposing engineer may be asked to submit detail information such as path profiles. The proposal cannot be refused if it can be shown to be technically sound. The FCC would see an application after it was agreed by all parties to be acceptable. At that point it would require only a cursory review.

### **Suggestion 3.)Construction Time Limit**

There should be a strict time limit in which the grantee should have in which to construct. Waiting 12 months to see if the grantee will do anything is not in the public interest and plays right into the hands of the pure speculators. The license grant (conditional) should be made swiftly, perhaps within one month of the completion of the coordination process. But the applicant should be required to show within 1 month of the grant, one or more of the following:

a) Certificate of completion of the pouring of the slab for the foundation of any building or tower required and firm order of equipment from a bonafide equipment supplier, with appropriate down payment or financing arrangement.

b) Lease of the headend and tower space with a copy of the check used for the deposits, and firm order of equipment from a bonafide equipment supplier, with copy of the check used for the down payment or appropriate financing arrangement.

c) Firm commitments from programming sources and the order for appropriate equipment for delivery of that programming (earth station, video tape machines or microwave relay, etc.).

There may be devious attempts to satisfied the above requirements by grantees that have not really prepared to install a system. To deal with that there should, after six months be a review (perhaps submittal of photos, etc.) and if it is clear that there was no construction in progress the market should be opened back up. Full service should be on the air in 9 months.



These requirements will do more to deter speculators or make speculators into real builders than worrying about settlement groups or requiring financial certifications or any of the other ideas presented. Grant the full block quickly and if they don't build quickly take it away. The idea is to get service to these communities.

#### **Suggestion 4.)Disallow Settlement Groups**

We agree that the FCC should disallow settlement groups. There should be no need for lotteries. This is not a new band of spectrum that is suddenly opened to the public.

Applications should be well thought out and applicants should be prepared to implement them immediately. Keep the one day window and disallow settlement groups. Actually with the prior coordination procedure the key day becomes the day of the first prior coordination notice for a given market. The FCC is not even involved in the process until later, when the coordination is complete. Multiple applications filed on the same day by a group should be returned. The group should form a legal entity (partnership or whatever) before they file and thus file a single application.

#### **Suggestion 5.) Smart FAX or Electronic Filing**

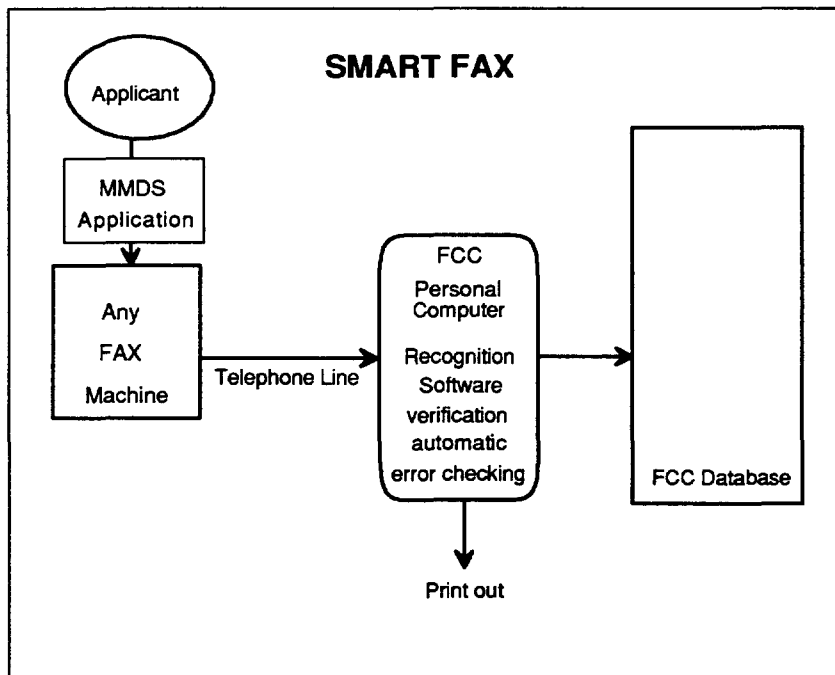
The actual applications could be submitted in a form more suitable for processing by the FCC. There are several alternatives to manual entry of data. Some of them include: data submission via modem,<sup>6</sup> via smart FAX<sup>2</sup>, data could be submitted on diskette in a predefined

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<sup>6</sup> Successfully implemented by the IRS

<sup>2</sup> Microsoft is one of several large and small companies including SAFE that uses this system for automatic order entry and data collection from geographically dispersed customers/users/cleints.

format<sup>1</sup> or through an electronic Bulletin Board Service.<sup>2</sup> There is a problem with the quantity of applications and getting them into a database for processing. We believe the previous suggestions will slow down the number of new applications, however if the FCC anticipates a rush of applications for a particular service there are a number of simple methods that can be used to get the data automatically in the appropriate database format required for further processing without resorting to manual entry by FCC staff. With the "smart FAX" (see diagram below). An applicant would be able to fill out an application by hand and using a FAX machine send it to the FCC and it would automatically become part of a "holding" database that would be processed after certain verifications are performed. All this without



manual data entry. It is being done now by hundreds of businesses that want to cut down on their data entry problems and increase accuracy of data collection. Records in that "holding" database can be ported over to the main database at any time. This

system requires from the applicant only the appropriate FCC Form, a pencil or pen and a FAX machine. For those without a FAX machine they can be sent in via mail and put in the system

<sup>1</sup> Used by military procurement agencies in their bid-proposal process.

<sup>2</sup> Corporate Electronic bulletin boards have become a popular alternative means of information exchange for high-tech companies and their customers.

automatically at the FCC by a FAX or a scanner. This kind of thing can be done directly through a modem line and an electronic filing system similar to that used by the Internal Revenue Service. An electronic filing system would require an additional level of technical capability by the applicant that the Smart FAX system. The FCC must make plans to automate its in-processing system to take the incredible delays out of the system. The answer is not to limit the number of applications by a clever manipulation of the rules or to return applications that are not "letter perfect" having make it impossible to create "letter perfect" applications. There are exceedingly simple ways to automate the system. Perhaps the simplest for the FCC would be to issue a data set, and have applications filed on 3½" or 5½" IBM floppy disks in dbase III format. This is a very easy requirement for a computer literate application service firm to meet. For a very small fee (less than \$100) applicants without computers could have their applications computerized and filed for them. This would remove the data entry requirements of the FCC. We believe that the problems at the FCC start with the massive data entry task brought on by the multiple applications. We do not see the multiple applicants in a given market as somehow insincere. We believe they have every intention in developing systems if they could only have their applications processed. Their applications cannot be processed until they are entered into the database and an engineer reviews the engineering. Our proposals remove both of these problems from the FCC and therefore will directly support the intention of this NPRM.

## Response to items raised in the NPRM

### Format of this section:

We first either quote or paraphrase each individual request for comment as it appeared in the NPRM in sequential order. Our comment or discussion on each of these sections follows under the heading "SAFE". Paragraph numbers refer to the NPRM paragraphs.

#### SAFE:

Regarding the broad concept of reclassifying the MMDS service under different bureaus, we believe the FCC should make that decision and make it with the best interest in mind for the industry keeping in mind the needs of the industry, i.e. a large channel block in order to compete and speed in processing.

¶ 8. *"...we specifically request commenters to discuss whether (1) a functional distinction between common carrier and non-common carrier MDS offerings continues to exist, and (2) under National Association of Regulatory Utility Commissioners v.FCC, even common carrier MDS licensees appear indistinguishable from traditional private carriers."*

#### SAFE:

1) If a cable television system owner is a Common Carrier, then so is a Wireless Cable operator. If a cable television system is considered private, then so should a Wireless system operator. In any case we do not believe that a change as to which bureau processes the applications will materially affect the speed of processing unless there is some method of automation adopted.

2) We are not sure how a Wireless system appears with respect to the above citation, but we do not see the benefit unless by reclassifying the service all channels can be placed in within a single regulatory bureau

*... "We also ask commenters to discuss any potential benefits that would inure to wireless cable operators as a result of being reclassif(i)ed as private radio licensees."*

#### SAFE:

As we stated above, the FCC should determine the cost/benefits of reclassifying, knowing that the industry has been languishing for 10 years and is now starting to grow as a result of some loosening of the previously tight regulatory noose. If you are asking us which bureau seems to perform best and would be best in clearing out the backlog, the answer seems to be any bureau other than the current bureau. We believe

that if there were a sincere desire in the bureau to expedite processing and not just return all applications where they could be returned then the backlog would not would not be as large as it is. We do have good experiences with the Private Radio Bureau and believe that the staff there are diligent and hardworking, but we still believe there should be increased automation and a prior coordination process.

¶ 9. *Processing and regulation to Mass Media Bureau: " ..we seek commenters' views as to whether the fact that the Mass Media Bureau is the situs for the processing and regulation of ITFS operations makes it most logical for us to process and regulate the MDS in the Mass Media Bureau as Mass Media service."*

**SAFE:**

If you approach the question from the standpoint of number of channels (out of the 31) there are more ITFS channels than any other, if that makes it logical to regulate Wireless cable in the Mass Media Bureau then it should be done. The service is actually similar to Broadcast television, is there a reason the FCC has not considered moving it to that bureau? We would like to understand the real logic behind this discussion of "which Bureau?".

¶ 10. *...we request commenters to discuss whether, in their view, the rule changes we are considering in this proceeding would alone be sufficient to expedite MDS processing."*

**SAFE:**

We do not see the rule changes proposed in this NPRM as sufficient to expedite processing and further the goals set out in ¶ 1 of the Notice. Quite the opposite. The sum total of these proposed rule changes makes for a much more complicated process for all concerned. Previous applicants, tentative selectees, and new applicants. In our view the net effect is negative, both on processing speed and regulatory flexibility. We believe it would be helpful to remove regulatory burdens rather than adding them. The proposal that a tentative selectee should have to amend his/her application now after making it through the hurdles thus far and have it dismissed if it does not meet a mileage separation shows the true disregard inherent in the FCC for the public. We believe that there is no need to delay the granting of the current long list of tentative selectees. Many of them are very anxious to build their systems. They want to know why the FCC is delaying their build-out plans. We can only answer, after reading the NPRM that the FCC plans to dismiss their applications after changing the rules.

¶ 11. *...discuss impact of rule changes on both existing operators and MDS applicants.*

¶ 12. *...mileage separation standards proposed rather than engineering new stations with a minimum desired to undesired C/I ratio as is currently required.*

**SAFE:**

Everything discussed under this idea and the idea itself is totally inappropriate for the licensing of any type of radio station. Do we really believe we have to resort to charts and graphs in order to determine the correct placement of microwave stations that share the same airspace? In this day where there is a computer on every engineers desk, digital terrain databases available if not within a work group, at least via a quick phone connection, eliminating intelligent site engineering is a shame. All the calculations are available from one of various sources. We cannot understand the reason for the amount of thought and effort that obviously went into this NPRM at the FCC the result being that we have to give up the process of engineering radio stations for compatibility.

¶ 13. *"...commenters are asked to set forth their views as to the sufficiency and necessity of the suggested criteria, and to discuss the perceived impact thereof on proposed and existing MDS operations in terms of, inter alia, the avoidance of harmful interference and spectrum efficiency."*

**SAFE:**

The criteria described in the NPRM is conservative for most cases, however cannot be applied indiscriminately. Our country has mountains, planes, hills, valleys and canyons. By forcing the engineer into this kind of a box we do not believe it will serve any useful purpose. The staff at the FCC will have to be trained to interpret the charts and tables. There will be less understanding of the real situation at any particular transmit location because the HAAT numbers and associated charts get in the way. The microwave engineer is able to suggest the use of shaped beam antennas which will best cover a population zone and avoid an adjacent community.

The engineer can use signal polarization and even carrier to carrier frequency offset to meet interference objectives. By taking all these and other tools away the FCC is taking away the ability to place MMDS transmitters in many communities that need service both Wireless cable and ITFS. The majority of the educational institutions will not spend the money on an ITFS system that they have to finance themselves. With the help of a Wireless cable operator who is putting together a critical mass of 20 or more channels, the ITFS system gets built along the way.

Without the Wireless cable entrepreneur nothing gets built. Without the engineering flexibility there can be far fewer transmit locations. As for spectrum efficiency it is very inefficient to be blind to the physics of radio propagation and the effect of actual obstacles on that propagation.

¶14. *"...We solicit commenters' impressions as to the desirability of routine short-spacing in view of the impact thereof on both existing operators and our effort to facilitate the processing of MDS applications. Finally, we ask commenters to discuss the relative merits of a proposal to retain our existing co-and adjacent channel interference criteria, and to address the impact that the retention of these standards would have on our goal of expediting the processing of both backlogged and new MDS applications."*

**SAFE:**

Our view of this type of non-engineering is that it is not in the public interest and if it does speed the application process it will do so only because:

1) The vast majority of pending applicants have not retained a law firm and engineering firm to revise their applications and will simply not be able to comply with these new rules.

2) Most of the locations that have been filed in the past two years will not meet the spacing criteria and will be returned. Therefore in terms of processing applications it will give the FCC a reason not to process the backlog of applications. There will be a great clean out of applications.

Rather than go through all this trouble to devise rules that will enable that kind of cleanup, we would prefer that the FCC simply return all pending applications, set up the rules as suggested in our suggestion #1, #2, #3, #4, and #5 or in some other straightforward logical way and start all over. There have been previous rulemakings that have not succeeded in cleaning up the backlog. (NPR & NOI Feb. 22, 1990, - Report and order October 26, 1990, and Order on Reconsideration, October 25, 1991) We believe the FCC regulators are operating in a vacuum. We believe they have made up their minds as to how to proceed and will proceed that way no matter what is counter proposed. We are not so naive as to believe our proposal is flawless, however since the window opening in April 20, 1988 and including the above cited rulemakings the regulatory actions have failed to have their stated effect.

¶ 15. (footnote 28) *We also request comment on whether existing adjacent channel MDS licenses, conditional licensees and applicants should receive protection from ITFS applications in this fashion. (80- and 48- kn separation standards)*

**SAFE:**

We believe it is wrong to use separation standards at all. However every channel in the group of 31 must be treated equally. It makes no difference whether it is an ITFS or an MMDS system operating, interference does not discriminate. If you are asking if the picture standards should be better for ITFS or MMDS the answer is that they should both be totally interference free. This will not be insured by applying separation standards, unless the standards are so great that they will disallow any new applications. If that is the purpose of the rulemaking then it should be stated that way. If the FCC considers that there are enough stations, enough pending applications and the FCC will not grant additional licenses it should be so stated.

To suggest that because short spacing standards are successful in the Specialized Mobile radio service they should be applied here is a fallacy. Specialized Mobile Radio operates on a different frequency band and the requirements of the receivers are quite different. In the MMDS service we are dealing with fixed parabolic focusing antennas operating above 2GHz.

¶ 15. (footnote 29) *"We solicit comment, however, as to whether a method for more immediate relief should be considered. "*

**SAFE:**

We believe that any operator (cochannel or adjacent channel) that causes interference into any other system at any time either on system turn up (which should be monitored and recorded by all parties to the coordination) or 10 years down the line, must immediately cease and desist. The interfering operator must take remedial steps to correct the situation and conduct a performance test to certify non-interference prior to resuming operations.

The FCC should not limit the number of continuous on-air days as 60 or 120. If we take 120 days and trees are cut mid path which creates a L.O.S. situation which didn't exist, is the FCC proposing that the ITFS operator must now live with this interference? Each operator must engineer his system with enough conservatism that he is assured that it will operate without causing interference during the Summer as well as during the Winter. Regarding the demonstration of interference the proposed scenario is reasonable. We would emphasize that all this should occur without the intervention of the FCC.

If the idea of prior coordination is accepted these operators will have exchanged engineering studies already and it would be a simple matter for one to call the other to discuss an abnormality that is suspected to be interference. If the problems could not be worked out of course the FCC could be brought into action, and it would behoove the "victim" operator to copy the FCC on any formal correspondence generated in this matter. However there should be no need to tie up valuable FCC resources for these kinds of routine questions of suspected interference. The key to the kind of cooperation in this service is that there will be a day when reciprocal cooperation is expected. The FCC could be very helpful in developing an attitude of operators solving problems for the benefit of all rather than an atmosphere of mistrust and the need to involve the FCC and possible litigation.

¶ 16. *"...an MDS applicant must demonstrate (1) that the applicant is legally, financially, technically and otherwise qualified to render the proposed service; (2) that there are frequencies available to enable the applicant to render satisfactory service; and (3) that it has a station site available." would a simple certification of the truth of these things be more effective? "A similar certification requirement is used under Part 94, and has proved as effective as the more onerous requirements ..."*

**SAFE:**

This is an interesting question from the standpoint of the goals of this NPRM are concerned and the problem of thousands of applications that are clogging up the system.

These are rules (quoted above) that have not been enforced in the past for the most part but that if they were may have eliminated the bulk of the applicants of the past



few years. We are wondering why the FCC has chosen not to enforce these rules that would clearly have helped reduce the backlog. If it is because the rules are too subjective, then they should be modified. They were considered appropriate at one time. We are wondering what has now made them inappropriate? We believe that it may be difficult or almost impossible to ascertain the technical qualifications of an applicant and the financial qualifications can be simply bought for an interest in the proposed system. The idea that a certification of these things is "effective" is curious to us. We are not sure what is meant by the term "effective" here. By "effective" is it meant that the processing is speeded. Or by effective is it meant that more sincere applicants are submitting applications. Or is it that it makes no difference one way or another and it is just more useless verbiage to be carried on through the application and that no-one will look at it or check up on it anyway, unless it is missing. When you prepare applications for any service you quickly find out what is required bulk filler and what is meat. This is just more filler, it seems to us. The interesting thing with these rules is that here was a vehicle that could have been used to reduce the backlog if the Bureau wanted to make use of these rules.

¶ 17. & 21. *"...we are considering disallowing settlement agreements..."*

**SAFE:**

We agree. We have discussed this point in detail previously.

¶ 26. *"...we propose as another alternative that licensees be selected by lotteries held for service areas defined by Metropolitan Statistical Area (MSA) or Rural Service Area (RSA) boundaries..."*

**SAFE:**

We disagree unless this is coupled with the prior coordination procedure suggested by us. If it is adopted with the coordination procedure there should be a provision for dividing up the MSA or RSA. If it is done this way then there is no need for this designation at all. What purpose would it serve. It appears to be another complication that has to be fixed for the situations that don't fit neatly into the formula. We do not need this complication and do not believe it would speed processing or make Wireless Cable more competitive.

¶ 27. *"We seek comment with respect to whether a selectee should be granted all remaining MDS frequencies in the MSA or RSA without regard to the frequencies originally requested."*

**SAFE:**

Anything which gives the operator/applicant more channels will make Wireless Cable more competitive. Although we do not agree with the basic , premiss we do not disagree with this provision.

¶ 28. *"... we seek comment on whether we should require a specific build-out of an MSA or RSA based on land area or population and whether unserved areas should be subject to new applications at some point in the future.*

**SAFE:**

With this question the rulemakers are admitting that there are now and these rules will continue to create large areas of unserved populations. If the engineering flexibility is not taken away there will not be these unserved areas that have to be dealt with in the future.

MSA and RSA boundaries are artificial and do not always conform to population centers. This service has not need to conform to artificial boundaries. It will only further constrain the industry growth to place more barriers on system design by forcing this kind of artificial constraint.

¶ 29. *"...we request commenters' views as to whether, in light of the complicated task before us in undertaking to process thousands of applications and conducting separate lotteries, it would simply be preferable to return all pending applications and establish a new window for acceptance of MDS applications."*

**SAFE:**

The lotteries can be automated using methods proposed in other branches (SMR lotteries, for example). We do not believe it is necessary to return all these pending applications. However if the processing of these pending applications, some dating back to 1983, is an impossible task then there is no choice but to return them. It should be announced that the FCC does not the capacity to process these applications (which is quite understandable given the lag in the Federal automation compared to private industry automation).

An honest appraisal of the FCC capability can only be made by the FCC, but it appears that it is an impossible task. If the applications are returned, the FCC should then devote it's energy to develop the capacity to process applications and a strategy to accept filings using one or more of the common automated filing systems described earlier to eliminate manual data entry and the delay associated with that in-processing task.

If this were done (dismiss all pending, and rewrite the rules) and a new filing window was to be established, we strongly recommend that serious consideration be given to the prior coordination process as a means to alleviate much detail engineering review and staff time at the FCC and also meet the needs of the industry for service within any community that can support the service.

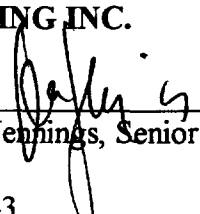
**Conclusion:**

We do not agree with the bulk of the proposed rule changes except for the items regarding settlement groups. Our position is that engineers should be allowed to serve the industry with innovative solutions and that a prior coordination process would greatly facilitate the licensing process without giving up technical flexibility. We also strongly recommend that the FCC automate the process to eliminate as much as possible manual entry of data. The savings in time and accuracy of information would be tremendous.

We believe our suggestions would solve the problems of increasing the size of the backlog and make the Wireless Cable applicant and grantee much more competitive. As for the backlog itself we believe tentative selectees should be granted and an assessment by the FCC if it has the capability to process the remaining backlog should be made and announced as soon as possible. If the backlog cannot be processed we want to know.

Respectfully submitted,

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